

A NOTE ON THE BIRDS OF KULU

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From the administrative point of view Kulu is the Head-quarters Tehsil of the Kulu Sub-Division of the Kangra District of the Punjab. This Sub-Division includes four main areas, namely, Kulu, Saraj, Spiti and Lahul.

From the point of view of Natural Geography we may consider Kulu as the Upper basin of the River Beas.¹

The Beas rises on the Rhotang Range of the Central Himalaya at about 13,000' and its main tributaries are the Parbati, the Sainj, and the Tirthan which all enter it before the river passes from Kulu territory into that of Mandi State.

The whole basin is enclosed by very high ranges with a mean elevation of 18,000' which separate it from the Spiti, Chenab and Ravi Valleys; spurs from these ranges extend down to the Banks of the Beas; a lower range which in its ramifications largely makes up the Saraj Tehsil, separates the Beas basin from the Valley of the Sutlej.

The net result is a mountain area of the wildest character and most beautiful scenery. The lowest altitude is about 3,000' at the Larji Gorge where the Beas enters Mandi State: from there the main valley rises slowly to Manali 6,000', the fertile cultivation and level spaces of the lower parts about Bajaura gradually contracting until the Beas has become a rushing mountain river fringed with beautiful Alder beds and frowned upon by rocky precipices.

Cultivation occupies a very small extent of the area; the greater part of the country is clothed with magnificent forests, while the upper portions of the higher ranges are bare and desolate, wreathed in places with perpetual snow.

The avifauna is purely Himalayan in character with the exception of a small patch of cultivated country about Bajaura 3,600'. Here there are small numbers of species which are typical of the plains of India such as *Corvus splendens*, *Cisticola juncidis* and *Anthus rufulus*, which have somehow colonized this remote area amongst the mountains.

My acquaintance with Kulu is of long standing, having commenced in the year 1910. It has never been my privilege to live in the place but I have altogether been there six times, twice in early winter (November-December) and four times in summer (May-August). This of course is in no way sufficient to allow me to write a proper account of the local avifauna but I have ventured to place my notes on record, so that they may be available as a guide to the casual visitor, or a starting point to any one luckier than myself, who may live in Kulu and prepare a full and detailed account of the birds of a most interesting area. A considerable number of local specimens of birds and eggs are in my collection.

In the main these notes refer to Kulu proper but any observations available regarding Saraj have also been included. I have already published in the pages of the *Ibis* my notes on the avifauna of Lahul and Spiti, the other cantons of the Kulu Sub-Division.

M. Babault who was collecting in India and Ceylon on behalf of the Paris Museum in 1914 visited the valleys of the Beas and Parbatti on his way to Ladakh. His observations have been published in the *Résultats scientifiques du Mission Babault* and the pertinent portions have been included here for the benefit of English readers.

¹ *The Normal Rainfall in the Kulu Sub-division is as follows:—*

	Annual.	Jan.	Feb.	Mar.	Ap.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Banjar...	41·54	3·06	2·89	3·22	2·34	2·27	3·64	9·03	8·99	3·58	0·81	0·56	1·15
Kulu ...	39·19	4·31	4·18	4·50	3·07	2·17	2·34	5·93	6·25	3·33	0·98	0·62	1·46
Nagar...	49·11	5·17	5·38	6·18	3·70	2·55	2·80	7·82	7·73	4·06	1·03	0·88	1·81

A few notes by other observers have also been incorporated into this account, including a list of species furnished by Mr. C. H. Donald to the local Gazetteer.

***Corvus corax tibetanus* Hodg.** The Tibetan Raven.

M. Babault includes the Tibetan Raven amongst the list of birds that he met with at Tchari Djony between May 27 and June 2, that is to say about the border between Spiti and Kulu. It is of course fairly common in Spiti and Lahul. According to Stoliczka 'only very few come down in winter to Kulu.'

***Corvus coronoides intermedius* Adams.** The Jungle Crow.

The Jungle Crow is a common and resident species throughout Kulu, occurring alike in village, forest and alpine pasture. I have seen it following caravans to the summit of the Rhotang Pass 13,000 ft. and it may be said to go wherever man goes, occupying in this mountain area the position of the parasite on man that *Corvus splendens* is in the plains. Nests with young were observed in May and June.

***Corvus splendens* Vieill.** The House Crow.

It is curious that there is an isolated colony of this Crow in the Kulu Valley about Bhuin and Bajaura: here the species is common for a stretch of about 10 miles, and I have seen a single individual (August 6, 1923) by the Beas a mile above Sultanpur. These birds are resident and have eggs about the middle of June. In the surrounding parts of Kulu they appear to be unknown and I have seen none in Mandi or in the Kangra Valley with the exception of a few birds at Dhelu 4,000 ft. (November 23, 1923).

M. Babault obtained 2 males at Bajaura and attributes them to the race *C. s. zugmayeri*, but these Kulu birds appear to me rather to belong to the typical race. The valley about Bajaura is the habitat of several other familiar birds of the plains, it is interesting to note, such as *Dicrurus macrocercus*, *Anthus rufulus*, and *Cisticola juncidis*.

***Corvus monedula* (L.).** The Jackdaw.

Hume states (N. and E. 2nd ed. I. 12) of the Jackdaw 'I have seen it in the hills in summer as far east as the Valley of the Beas.' It is a pity that he never amplified this record as it has been the basis of a good deal of error regarding the breeding range of this bird, which I have already discussed in the *Journal* (xxix. 161). In any case the occurrence must have been exceptional as in the course of six visits to Kulu, both summer and winter, I have never met with a single Jackdaw.

***Urocissa melanocephala occipitalis* (Blyth).** The Red-billed Blue Magpie.

M. Babault seems to have met with this Magpie fairly commonly in May and June, about the Dulchi Pass, Bajaura, Tchong, and Naggar, and he preserved 4 specimens. This is a slight extension of the known range which was hitherto considered to be bounded on the west by the Sutlej Valley. Although on the look out for the species I have personally failed to meet with it in Kulu.

***Urocissa flavirostris cucullata* Gould.** The Yellow-billed Blue Magpie.

Gould's type of this race was obtained in the Kulu Valley and is now in the British Museum. This Magpie is one of the most common and noticeable birds in Kulu, with its beautiful colour, long graceful tail, and remarkable range of notes. It is found everywhere up to about 7,000 ft. and is particularly common in the Alder groves along the Beas. I have never found the nest but have seen fledged young on June 25.

***Dendrocitta formosæ occidentalis* Ticehurst.** The Himalayan Tree Pie.

I have observed this sombre looking Treepie in Kulu as follows:—A party at Aramghar (5,000 feet) and one at Dhobi on November 30, 1922: a party including young of the year at Aramghar on July 9, 1923; a couple at 5,000 feet in the Parbatti Valley above Jhari on November 10, 1923.

It is common along the Mandi Valley from Mandi to Dhelu.

Garrulus lanceolatus Vigors. The Black-throated Jay.

M. Babault obtained a male at Jhari and a pair on the Dulci ; Pass in May or June. I have observed it as follows :—One on the road at Jagatsukh on June 18, 1921 ; one by the Beas road at Largi on June 29, 1921 ; one near Katrain on December 6, 1922. It appears to be less common in Kulu than along the outer ranges of the Western Himalayas.

Nucifraga caryocatactes hemispila Vigors. The Himalayan Nutcracker.

Hume says (N. and E. 2nd ed. I. 30) ' my people have taken the nest with young in April below the Jalauri Pass.' M. Babault obtained specimens at Manikaran, Tcho-ti and Pulga in May and June, full feathered young of the year being shot on May 19, at Pulga.

The Nutcracker is a common bird in the Pine Forests of Kulu from 5,000 to 9,000 feet according to the late General Osborn (Journal, B.N.H.S. xv., 712) who says ' in fact it follows the region of the *Pinus excelsa*, the seeds of which furnish it to a great extent with food. The volume of the Journal cited above, contains several notes on a controversy whether the Nutcracker or the Flying squirrel was responsible for damage done to walnuts, which ended in the blame being laid at the rodent's door.

I have observed the Nutcracker in many localities in Kulu. In summer it may always be heard in the Silver Fir Forest about 7,000–9,000 feet on the Bhubhu Pass. I have heard it in June at 9,000 feet in the Nullah below the northern face of the Jalauri Pass. In July at 7,000 feet on the Dulchi Pass, in August above Manali on the Kothi road at 7,000 feet, and in July at 9,500 feet at the entrance to the Hampta Nullah. In November 1923 I saw many pairs from Manikaran to Pulga, 5,000–9,000 feet. In December I have heard it from 6,500 to 8,000 feet behind Katrain and Baragraon.

Pyrrhocorax pyrrhocorax (L.). The Common Chough.

M. Babault observed this species at Tchari-Djony at the end of May, in great numbers at Kothi on June 28, and on the Rhotang on June 29.

During the summer months the Chough may be observed commonly in pairs or in flocks on the alpine pastures from the Beas tunnel at Kothi (8,000 ft.) to the summit of the Rhotang Pass, 13,000 ft. Here I believe they breed here as on May 25, a couple of birds emerged from stick nests in the face of a cliff by Rahla Rest House, which however proved to be quite inaccessible.

They are doubtless common on similar elevations throughout Kulu though I have only the following records :—June 8, 1919, Malasu Nullah a few over the snow ; June 16, 1922, a small party flying high over the Jalori Pass ; September 15, 1923, some at Serahan ; October 31, 1923, 3 on road at summit of Bhubhu Pass. Presumably during the winter they move down to the bottom of the valleys though there is no record on the point.

Pyrrhocorax graculus (L.). The Alpine Chough.

M. Babault obtained a male at Tchari-Djony at the end of May.

According to Stoliczka this chough (which is so familiar in Lahul and Spiti) is in the cold weather specially common in Kulu.

Parus major kaschmiriensis Hart. The Kashmir Grey Tit.

This Tit is a common and resident species along the valleys at altitudes of from 3,000 to 6,000 feet from Manali to Larji along the Beas and in the side valleys at similar elevations. I found a nest with young in the trunk of an alder tree at Raisan on June 19.

Parus monticola Vigors. The Green-backed Tit.

The Green-backed Tit is common in Kulu in a slightly higher zone than the last species, starting in summer at about 5,000 feet. I found a nest with feathered young in a stump at Manali on May 22.

Lophophanes melanolophus. (Vig.). The Crested Black-Tit.

This cherry little Tit is common in summer in the highest forests from about 6,000 to 10,000 feet ; during the winter it descends to a lower zone and then is one of the most prominent members of the hunting parties that are such a feature of Himalayan bird life. I found a nest with naked young on May 25, in a large

hole high in the trunk of an oak tree by Rahla Rest House, and another nest with 5 moderately incubated eggs on June 16, in the trunk of a Yew-tree by Shoja Rest House.

There is little to note on this bird's behaviour; he is always busy in the search for food high in some moss-grown giant of the forest, and the soft gold-crest-like note 'chee chee' will be heard long before the tiny bird is seen in the branches above one: sometimes he is alone, at other times two or three wander about in loose companionship, and in winter flocks of up to 50 in number, collect and join the hunting parties. In spring they rest occasionally from the incessant hunt for food, and from the top of some lofty twig utter the loud clear call note 'want you need you want you need you' or deed you 'deed you deed you'.

Lophophanes rufonuchalis rufonuchalis. (Blyth). The Simla Black-Tit.

M. Babault records obtaining a male from Pine forest in the Valley of Kulu in May without giving more exact data.

I came across a party at 10,000 ft. on the northern slope of the Jalouri Pass on June 17, 1922.

It of course breeds commonly in the Junipir forests of Lahul and is probably more numerous in Kulu than the above records indicate.

Machlolophus xanthogenys xanthogenys (Vigs.). The Yellow-cheeked Tit.

M. Babault obtained a male on the Dulchi Pass on April 29. I have not met with the species in Kulu.

Ægithaliscus niveocularis (Moore). The White-throated Tit.

On June 17, 1922, I secured 4 specimens, 2 adults 2 juveniles, from a family party in a patch of willow scrub; the young had clearly been hatched in the neighbourhood. This was at 9,800 ft. on the Kulu side of the Jalouri Pass not far from the summit.

On November 16, 1923, I almost certainly saw one of these tits in some bushes at 4,800' by Banjar but a dog disturbed it before I could verify the identification beyond doubt.

Ægithaliscus concinnus iredalei Stuart Baker. The Red-headed Tit.

The Red-headed Tit is fairly common in Kulu and I have met it in summer from 5,500' up to 7,500'. In winter it descends as low as river level though I have also seen it as high as 6,500' at that season. In all probability there is little seasonal altitudinal movement in this species.

Sitta himalayensis Jard. and Selby. The White-tailed Nuthatch.

I procured a male on June 17, 1922, at 6,500' near Jhibbi.

Sitta leucopsis leucopsis Gould. The White-cheeked Nuthatch.

M. Babault procured a pair at Pulga in May and June and remarks that it was more common at Tcho-ti than in the former place. In early November at Pulga I heard a Nuthatch very commonly in the pine forests from 7,000 to 9,000' and believe that it was this species.

On June 17, 1922, I saw one in company with a party of *Parus rufonuchalis* at 10,000' on the Kulu side of the Jalouri Pass.

Garrulax albogularis whistleri Stuart Baker. The White-throated Laughing Thrush.

M. Babault obtained two males and a female in the neighbourhood of Bajaura and the Dulchi Pass at the end of April, and he also found a nest containing 2 young birds with feathers commencing to sprout.

Trochalopteryx erythrocephala erythrocephala Vigors. The Red-headed Laughing Thrush.

Hume says of this Laughing Thrush (N. and Eggs. 2nd edn. vol. i, 55) apparently including Kulu:—'From Kumaon westwards, at any rate as far as the Valley of the Beas, next to *T. lineatum* the most common species of the genus'. I have however only seen a single individual in Kulu and that at Kasol on November 6, 1923.

Trochalopteron variegatum variegatum (Vigors). The Eastern Variegated Laughing Thrush.

This Laughing Thrush appears to be a common bird in Kulu, breeding on the higher ridges from 8,000 to 10,000 ft. and moving down in winter to a lower zone, but I have no very detailed information about it. In Lahul the western form *T. v. simile* occurs and the Rhotang Range is therefore probably one of the boundaries between the two races. It would be interesting to verify which bird is found in the Solang nullah and the forests generally along the southern face of the Rhotang.

Trochalopteron lineatum lineatum * (Vigors). The Nepalese Streaked Laughing Thrush.

The Streaked Laughing Thrush is one of the commonest birds of Kulu from Larji upwards to a height of at least 8,500 ft. in all the valleys. During summer it is scarce along the bottom of the valley from Sultanpur to Larji though some may always be found in the swamp between Bhuin and Bajaura, and in Kulu, as elsewhere, the bird is doubtless subject to a good deal of altitudinal movement according to season. It keeps much more to the ground than the other species of Laughing Thrush, and shuffles along in tangles of grass, bracken and other low herbage, flirting its wings and jerking the long tail, the members of a flock keeping up an incessant conversational squeaking in low querulous notes. It seldom ascends into trees and when disturbed from the undergrowth it merely flies a short distance down hill and pitches into the nearest cover into which it quickly threads its way out of sight.

Grammatoptila striata striata. (Vig.). The Striated Laughing Thrush.

M. Babault met with this large Laughing Thrush at Kothi on June 28. There appears to be no other Kulu record though as it is common at Koteghar in winter Stoliczka may have been right in his conjecture that these birds bred in the higher forests of Kulu.

Pomatorhinus erythrogenys erythrogenys Vigors. The Rusty-cheeked Scimitar-Babbler.

Hume includes the valley of the Beas in his account of the distribution of this species (N. and E. 2nd ed. vol. i, 87) but I have not met with the bird actually in Kulu. It is common in Mandi State and Kangra at elevations from 2,000 to 6,000 ft.

Stachyridopsis pyrrhops (Blyth). Red-billed Babbler.

The Red-billed Babbler is resident and apparently not uncommon in Kulu. I have met with it in June about 5,000 to 5,500' in the main valley from Sultanpur to Naggar, and in November at Sultanpur 4,000' and in the Parbatti Valley about Jari 5,000'.

Siva strigula strigula Hodgs. The Stripe-throated Siva.

I met a party of these Sivas on June 17, 1922, in some thick scrub at 9500 to 10,000' on the Kulu side of the Jalouri Pass: they doubtless breed here and in similar situations on other ranges. In winter they move lower down and I found a flock at 5,000' on the Kraon road on November 27, 1922.

Ixulus flavicollis albicollis Ticehurst and Whistler. The Yellow headed Ixulus.

There is a patch of Chestnut Forest at 5,500' on the road below Kraon where I have met with a party of the Ixulus in the same trees in May, July, August, and November. Otherwise I have only procured it in Kulu on December 5, 1922, from 7,000' in the hill-side jungle behind Katraian.

Pteruthius xanthochloris occidentalis Harington. The Green Shrike-Tit.

Stoliczka says 'Only 3 specimens were shot, in February 1867. in the southern part of Kulu.' There is no other record.

Microscelis psaroides psaroides (Vigors). The Himalayan Black-Bulbul.

In summer this Bulbul breeds throughout Kulu from Larji 3,000' up to 6,000' and doubtless higher in all the valleys and on the hill-sides. I have observed a few in November and early December at about 4,000' to 6,000' but the majority probably leave to winter in the outer ranges.

* *griscientior* of Hartert.

Molpastes leucogenys leucogenys, (Gray). The White-cheeked Bulbul.

A common and resident species in Kulu and Saraj from the bottom of the valleys up to a height of about 7,000 ft., I have found nests in June.

Certhia himalayana Vigors. The Himalayan Tree-Creeper.

A fairly common species throughout the Sub-division, usually seen with the mixed hunting parties except in the breeding season. It is a resident but moves altitudinally according to season.

Tichodroma muraria. (L.). The Wall-Creeper.

A common winter visitor to the sub-division where I have seen it in November and December along the valleys from 3,000' to 5,000'. A few perhaps breed at high altitudes along the Rhotang chain, but of this there is as yet no record.

The Wall-Creeper attracts the attention of the least observant in Kulu by its habit of feeding about the cuttings and retaining walls of the roads, climbing over their surfaces with a jerky mode of progression and a continual downward flick of the outer primaries. It takes to flight with reluctance before the passerby launching out into the air with a hovering undecided flight resembling that of the Hoopoe, a resemblance heightened by the long bill and broad round spotted wings, only to settle again a short distance ahead. It is also very partial to the large boulders that line the sides of the river beds, and it may often be found feeding on the stones close to the edge of the water. I have only once seen it climbing on a tree trunk. It occasionally flies up and endeavours to take an insect on the wing. Nowhere else have I seen this species so common as in Kulu.

Troglodytes troglodytes neglectus Brooks. The Wren.

In Kulu proper I have met with it in small numbers in November and December at heights from 5,000' to 8,000', and it is doubtless a resident in the sub-division breeding in a higher zone about the edge of forest growth.

This is one of the Himalayan birds that is most reminiscent to the exile from England, being, as it is, one of the few birds that is a race of an actual British species. It recalls the home bird in its demeanour and ways. Attention is drawn to it by the harsh and rather scolding metallic note 'chit chit chittr', as it flies from some tangle of herbage at the foot of a stunted bush to the litter of boulders that mark some forgotten landslide; it threads its way amongst the stones, now for a space disappearing into the hollows and crevices below them, then emerging on to some stone. There it waits for a moment, the tail cocked upwards and the head stiffly held back, often so far that the beak points almost directly upwards. It is intensely restless, a mass of nerves, incessantly bobbing and bowing, and turning first to one side and then to the other. Usually it is averse to taking flight but progresses amongst stone and hollow in little jerks and starts, with short flights of merely a foot or two; but once convinced that danger threatens it leaves for distant cover with a flight that is straight and strong and fairly fast. The song is loud and cheerful, as in the English bird, and is freely uttered in the bleakest of surroundings where drifts of snow coil amongst the debris of a rockbound nullah.

Pnoepyga albiventer pallidior Kinnear. The Scaly-breasted Wren.

In November and December I found this quaint little ball of a bird fairly common in the valleys of Kulu and Inner Saraj between 3,500' and 6,500'. It is a most arrant skulker keeping to thick bracken and evergreen undergrowth, preferably in the alder groves, in the dampest and most secluded situations. I have even found it in the water-logged tussocks of the Bhuin marsh. It creeps about close to the ground like a mouse and hardly ever takes to wing, and specimens may be secured only with the greatest difficulty. The call is a loud single note, quite unlike that of *Troglodytes*, but more warbler-like in character.

Tesia castaneocoronata castaneocoronata (Burton). The Chestnut-headed Wren.

The western limit of this beautiful wren is given in the Fauna as Garhwal but in November and December I found that it was not uncommon in the Kulu Valley about Sultanpur, and it was also reported to me from the Parbatti Valley. It was found in similar situations as *Pnoepyga a. pallidior* and has similar habits. The call note is a loud slightly double squeak, rather reminiscent of the note of *Phylloscopus humii*.

Cinclus cinclus cashmeriensis Gould. The Kashmir Dipper.

M. Babault met with this species about Pulga and Garampani between May 17 and June 4. I have not met with it in Kulu though it occurs at the Chandra Lake 14,000' and in Spiti at 13,000' across the border.

Cinclus pallasii tenuirostris Pallas. The Brown Dipper.

The Brown Dipper is one of the most characteristic of the birds of Kulu and Saraj, where it is found throughout the year on the Beas and its various tributary streams: during the summer it is found up to 9,000' and 10,000': but in the winter the birds become distinctly more common in the main valley and its probable that they then leave the highest zone of their summer habitat. I have not been able to find the eggs but birds in the spotted juvenile plumage are to be seen about in May and it is probably an early breeder.

The Dipper is a most active bird, never still and always busy. The harsh call 'dzchit dzchit' is a familiar sound along every stream, shrill enough to be heard easily above the roar of the waters; it heralds the approach of the small plump brown bird that flies swiftly along a foot or two above the surface of the water, swaying from side to side amongst the boulders and only making a detour over land to avoid some intruder at the water's edge; the wings appear rather small for the stout body and to make up for this they are vibrated very quickly in flight in sustained beats followed by a pause.

Settling on a stone the bird bows and jerks from side to side, or immediately starts feeding, keeping its foot-hold easily on slippery stones and disappearing under water either diving or walking. It swims freely on the broader pools, looking like a miniature moorhen, now and again diving and disappearing for a space.

On one occasion I was watching a Dipper standing on a rock and preening its plumage when the mate arrived. The first bird immediately stretched itself high on its legs, with the tail pointing straight downwards, and the head and neck extended to their full length with the beak pointing to the sky; it stood thus for some time with the wings whirring rapidly, the whole doubtless forming a courting display.

Larvivora brunnea (Hodgs.). The Indian Blue Chat.

M. Babault obtained a male at Pulga in May or June. I believe that I heard the song near Diwal village above Manal's at 7,000' on July 11, 1923.

Hodgsonius phoenicuroides (Hodgs.). Hodgson's Short-wing.

M. Babault obtained 2 females at Tchari-Djony and noted the species about Pulga and Garampani at the end of May or beginning of June.

Mr. Wells kindly presented me with a male which he had shot from a nest containing 3 young (hatched on July 8, 1922) near Chikka 10,000' in the Jagatsookh Nala. The nest was a cup of coarse grass lined with hair, placed about a foot from the ground in a low bush amongst some large boulders. A second nest was also found.

Saxicola caprata bicolor Sykes. The Pied Bush-Chat.

The Pied Bush-Chat is a summer visitor to the lower parts of the Kulu Valley and breeds in abundance up to a height of about 4,000', from Larji to Sultanpur and Manglaur.

Saxicola torquata indica Blyth, The Indian Stone-Chat.

Hume states (N. and E. 2nd ed. ii. 48) that he has found numbers of the nests in the valley of the Beas below Bajaura, but he presumably means at higher elevations on the hillsides; for in my experience the Stone-Chat does not breed in the same area as *S. c. bicolor* but occupies a higher zone from 4,000' upwards, commencing in the valley only about Sultanpur and becoming common about 6,000' as at Manali and Banjar. M. Babault procured specimens at the foot of the Rhotang and in the Parbatti Valley.

During the winter the species is fairly common along the valley from Katrain to Bajaura.

Oreicola ferrea ferrea (Gray.). The Western Dark-grey Bush-Chat.

Hume says (N. and E. 2nd ed. ii. 51), 'I have found many nests in Kulu . . . one near Sultanpur.' This Bush Chat breeds commonly through-

out Kulu and Inner Saraj at elevations from 5,500 to 8,000'. The majority probably leave the Sub-division in winter but in November and December I met with a few along the valley from Sultanpur to Bhuin.

Oenanthe deserti (Temm.). The Desert Wheatear.

According to Stoliczka the Desert Wheatear occasionally winters in Kulu; if so it would be of interest to discover which race is represented by these birds.

Enicurus maculatus maculatus Vigors. The Western Spotted Forktail.

The Forktail is a familiar species on the streams of the Kulu Sub-division being found at all elevation up to about 8,000'. It is a resident bird and probably not subject to any particular altitudinal movements according to season. It attracts the attention of even the least observant by the conspicuous black and white plumage, with the distinguishing white cross of St. Andrew across the back, and the long-forked tail which is swayed upwards and downwards vertically, slowly and with infinite grace, as the bird moves about the stones and banks of the streams that it frequents. The Forktail is not shy and continues to feed even in the near presence of an observer, sidling and turning on the stones, now facing one way, then turning round to the other. The call is loud and distinctive, and in the woodbound streams of the side nullah, is often the only indication of the bird's presence as it flies up or down the stream through the undergrowth disturbed by the approach of an intruder.

Babault found naked young in a nest on June 7.

Microcichla scouleri scouleri (Vigors). The Little Forktail.

The Little Forktail appears to be not uncommon in Kulu and Saraj for I have met with at least 2 pairs at Banjar 4,500' in June, a pair below Manali at 6,000' one at Rahla 8,800' and one at Jhikka 10,000' (Hampta Nala) all in July. In November and December I have found it in the Beas Valley at Sultanpur 4,000', and in the Parbatti Valley at Jari, Kasol, and Manikaran 4,000-6,000'.

Phoenicurus frontalis (Vigors). The Blue-fronted Redstart.

This handsome Redstart breeds at 13,000' amongst the rocky ledges of the summit of the Rhotang Pass, where I have observed it in June. In the same month it also breeds in the scrub on the northern face of the Jalouri Pass at 10,500'. Babault collected a pair in May or June at Ghary and says that he often surprised them in the bushes on the bank of the Parbatti, which seems curiously low for this species in summer. It doubtless breeds along the summit of all the high ranges in the Sub-division.

In November and December I have observed the species on the hillside behind Katraian and at Pulga 7,000'.

Phoenicurus ochrurus phoenicuroides (Moore). The Black Redstart.

On July 27, 1922, I observed a few Black Redstarts below the summit of the Hampta Pass at 13,000' and they probably breed here as they do in Spiti and Lahul, where they are amongst the most characteristic birds of those high valleys. Babault collected a pair at Manikaran and a male on the Rhotang, but he gives no details to show whether the Manikaran birds were breeding or on passage. There are no winter records for Kulu so perhaps the Sub-division, like the Simla and Dharmasala ranges, lies outside the winter range and regular migration routes of this common and wide-spread species.

Chaimarrornis leucocephalus (Vigors). The White-capped Redstart.

During the breeding season the White-capped Redstart is common and breeds on the Beas from 7,000 ft., above Manali, to its source on the Rhotang Pass 13,000 ft., and doubtless at similar elevations on all the larger streams. I have found fresh eggs at Rahla on July 11, and on the same day another half-built nest, so it appears to be somewhat of a later breeder than most birds. At this season it is distinctly a bird of high elevations and may be found up to 16,000 ft., in Lahul and elsewhere. During the winter months the species moves down to a lower zone and the birds are then extremely common throughout the valleys of Kulu, and even lower down into the foot-hills of the Himalayas.

Like the Plumbeous Redstart, the White-capped Redstart is most strictly a water bird but it differs from the former in its wider interpretation of what the term 'water' includes: for in addition to the rivers, streams and rills, it is found about wet mossy cliffs, precipitous marshy banks and similar situations in which the Plumbeous Redstart does not occur. Like it, however, it is pre-eminently a bird of boulders amongst rushing water, and here the two species are found together, fly-catching with little erratic flights from stone to stone. As with most Redstarts, the tail is an expressive organ. Continuously the bird beats the tail up and down, from well above the line of the back almost to touch the stone on which it is sitting, frequently accompanying the action with a deep bow; and this is done with the tail either closed or partly spread. As it starts to fly or settles the tail is fanned open, a glorious glimpse of chestnut and black. The ordinary call note is a loud plaintive squeak 'teeee' audible some way off.

Rhyacornis fuliginosus (Vigors). The Plumbeous Redstart.

The Plumbeous Redstart is one of the commonest and most characteristic birds of Kulu and Saraj. It is never found away from the rivers and larger streams, and with that reservation may be looked for anywhere between 4,000 ft. and 10,000 ft., in summer. It does not, however, care for the broader and hotter stretches of the Beas between Sultanpur and Larji. During the winter it leaves the higher zone of its range, and while at that season great numbers pass down to the waters of the foothills, it remains sufficiently common in Kulu up to at least 6,000 ft. It breeds throughout its range in May, June and July. The nests are built on ledges of rocks, in holes under earthen banks, in crevices between boulders and stones, in hollows in the trunks of Alder trees, in ivy on tree trunks and any similar situation, always provided that it is within a few yards of the water's edge.

The nest is a neat cup made of moss mixed with a few roots and leaves, and is lined with fine roots and fibres and occasionally wool and hair. The eggs are pale greenish in colour speckled and blotched fairly heavily with markings of reddish brown. They are usually four in number.

These graceful little birds strike the notice of even the least observant. No patch of stream is without its pair which spend all their time on the boulders in the middle of the rushing water, with occasional excursions to the bank or the bough of some handy tree. They flit from stone to stone and continuously make erratic little fluttering darts into the air after some passing insect; and as they settle the conspicuously coloured tail, chestnut in the cock, black and white in the hen, is slightly fanned and wagged up and down, the movement being repeated at intervals until the next little dart into the air. They are as quarrelsome as restless, and appear to have sharply defined territories, for the male with a provocative little snatch of song is always launching attacks at the intruder from some other pair, dashing at it and chasing it back to its own borders, regardless of sex. The short song is rather sweet and jingling and the hen also shares it; it may be heard occasionally in winter as well as in the breeding season. It is uttered either from some boulder in midstream or in the air as the little bird slowly flies with even movement but rapidly vibrating wings in a short parabola from one rock to another.

Cyanosylvia cyanecula abbotti Richmond. The Bluethroat.

A fine adult male Bluethroat was seen at Manali on May 23, 1921, at 6,000 ft. but I could not obtain it. From the bright colour of the breast I attributed it to this form.

Grandala caelicolor Hodgson. Hodgson's Grandala.

This rare and beautiful bird must breed at high elevations at the head of the Parbatti Valley, as Babault procured a male and female with the organs developed at Tchari-Djony between May 27, and June 2, 1914. It may be noted also that Stewart obtained some specimens from the collection of a Mr. Procknow, a missionary at Koteghar, which the latter said were 'strictly mountaineers and only got several marches in near the snow' (Zoologist) 1886, 439).

Calliope pectoralis pectoralis Gould. The Himalayan Rubythroat.

Babault obtained a male at Ghary on May 13,

Rubythroats breed on the ascent to the Rhotang Pass at about 12,000 ft. amongst boulders on the open hillside, a locality in which I have observed them in June, July and early August.

Tarsiger chrysaceus whistleri Ticehurst. The Golden Bush-Robin.

I saw a male at Jari 5,000 ft. on November 6, 1923.

Ianthia cyanura pallidiora Stuart Baker. The Red-flanked Bush-Robin.

In the middle of June I have found this species common and breeding from Shoja to the summit of the Jalouri Pass in the forest zone between 9,000 ft. and 10,000 ft., and it doubtless breeds on similar ridges throughout the Sub-division. One was seen at 6,500 ft. behind Katraian on December 3, 1922.

Adelura caeruleocephala (Vigors). The Blue-headed Robin.

In Nests and Eggs 2nd ed. vol. ii, 69, Hume records the taking of an egg of this species in the Humpta Nala at about 11,000 ft. He admits to the possibility of error, and the description certainly does not agree with eggs that I have taken in Lahul.

In winter this bird appears in the valleys of Kulu and Saraj and I have seen it in November and December from 4,000 ft. to 7,000 ft. both at Banjar and along the Beas Valley.

Saxicoloides fulicata cambaiensis (Lath.). The Brown-backed Indian Robin.

Stoliczka states that this familiar species is common in Kulu but I have not met with it; its existence there seems unlikely.

Copsychus saularis saularis (L.). The Magpie-Robin.

Observed in fair numbers at Sultanpur 4,000 ft. in May, June, and July, nests with feathered young being found on June 23 and July 29. A pair were seen at Manglaur Rest House, Inner Saraj 3,800 ft. on June 19, 1922. It is a summer visitor only and apparently leaves in August.

Turdus atrogularis Temm. The Black-throated Thrush.

A common winter visitor observed in the valleys in November and December.

Turdus unicolor Tickell. Tickell's Ouzel.

Only observed at about 6,000 ft. towards Manali, where I have seen one or two in May, June and July.

Geocichla wardi (Jerdon). The Pied Ground-Thrush.

I found a small flock of 5 or 6 individuals at 6,000' near Manali on May 24 and 25, 1921. They were feeding in brush-wood in a small wooded nullah by cultivation and flew up into the trees when disturbed.

On July 5, 1923, I met with a pair with newly fledged young in a similar spot by Kraun Rest House 6,000'.

Arceuthornis viscivorus bonapartei (Verr.). The Missel Thrush.

Babault met with the Missel Thrush on the Dulchi Pass between April 29, and May 1. Hume obtained the nest above Juggutsukh. On June 16, 1922, I saw 2 or 3 at 10,000' along the crest of the Jalouri ridge in the forests of Kharshu Oaks, whence they came to feed on the open summit of the ridge.

On December 8, 1922, 2 were seen in the Birch forest above Baragraon near Katraian.

Oreocincla mollissima (Blyth). The Plain-backed Mountain-Thrush.

Babault obtained a male at Tcho-Ti in May or June.

Oreocincla dauma dauma (Lath.). The Small-billed Mountain-Thrush.

I saw what was probably one of these Thrushes on the road below Manali 6,000' on May 22, 1921.

Monticola erythrogastra (Vigors). The Chestnut-bellied Rock-Thrush.

On November 30, 1922, I saw 2 males flying together about the tops of some Alder trees in the Aramghar marsh near Raisan 4,500'. Babault found the species at Ghary and Tchong in the breeding season.

Monticola cinclorhyncha (Vigors). The Blue-headed Rock-Thrush.

A common summer visitor noted in May, June, July and August from 5,000' to 6,000'.

Monticola solitaria pandoo (Sykes). The Blue Rock-Thrush.

On June 23, 1922, I found a nest with 4 partly feathered young in a rocky bank above cultivation in the valley below Sultanpur at 4,000'. A few birds noted about this area in June and July and a male seen at 6,000' above Manali on June 17, 1921, complete my Kulu records for the species. Babault however procured several specimens in May or June at Ghary, Manikaran, Pulga and Tcho-ti.

Myiophonus temminckii temminckii (Vigors). The Himalayan Whistling-Thrush.

The Whistling Thrush with its deep blue black plumage and yellow bill must often be mistaken in Kulu by tourists and sportsmen for the English blackbird. It can indeed escape the notice of few as it is excessively common throughout the valleys up to 11,000' in summer and to a slightly lower elevation about 8,000' in winter, while its large size, bold demeanour and noisy calls invariably draws attention to it. Primarily it is a bird of the rivers and mountain streams, but its strong flight enables it to wander freely about the precipitous crags and heavy woods that line every valley, and there is scarcely any piece of Kulu scenery that the traveller will stop to regard without sooner or later seeing one of these birds dash across the picture, and without hearing the melodious whistle or the harsh loud song mingling with the roar of the waters and easily rising above it; there is a peculiarly eerie squealing character in the song which truly matches it with its surroundings.

There is something very tight-trussed about the appearance of the Whistling Thrush as he hops and flies from boulder to ledge, from the ground to the broad branches of the alders and chestnuts; his hard shiny feathers are pressed close to the body and as the long tail sways slowly upwards above the long legs he has all the appearance of balancing on tip-toe, like a smart recruit awaiting his sergeants' word of command.

The nest is easily found, for it is a large massive cup of the usual Blackbird type and the bird depends for its protection, not on concealment but on the inaccessibility of its site, placing it on some rocky ledge or in a hollow on the face of a mighty boulder overhanging a rushing stream. Eggs may be found from April to July; they are very fragile and in appearance resemble large and very faded specimens of Blackbird's eggs.

Brunella collaris (Scop.). The Alpine Accentor.

One was seen on the road just above Manikaran at 6,500' on November 10, 1923, but the specimen was not obtained for racial identification.

Prunella himalayanus (Blyth). The Altai Accentor.

On December 8, 1922, I found this Accentor common in parties on the Kharshu Tharch, behind Baragrown, about 9,000'. Some parties of birds seen in similar ground above Pulga on November 9, 1923, were also apparently of this species.

Hemicheledon sibirica gulmergi Stuart Baker. The Kashmir Sooty Fly catcher.

Breeds commonly throughout Kulu in the forests above 5,000' up at least to 8,500' and is a summer visitor only; an occupied but in accessible nest, 40 feet from the ground on a side bough of a silver fir, was seen on June 15 and fledged young were seen on July 1.

Siphia strophciata Hodgs. The Orange-gorgetted Flycatcher.

Breeding birds were observed at 9,000-10,000' on the Shoja side of the Jalouri Pass on June 17, 1922.

Cyornis superciliaris (Jerd.). The White-browed Blue Flycatcher.

A common summer visitor to the forests throughout Kulu breeding from 6,000' to 10,000'. I found a nest containing newly-hatched young on May 24, placed in a hollow of the bark of an alder.

Stoparola melanops melanops (Vigors). The Verditer Flycatcher.

A summer visitor observed from the bottom of the valley up to 8,000' but not so common as in the outer Himalayan ranges.

Alseonax latirostris poonensis (Sykes.). The Brown Flycatcher.

Breeds fairly commonly along the Beas Valley from Sultanpur 4,000' to Larji 3,200' and in the Tirthan Valley to Manglaur 3,800'; a summer visitor only. Lays in May and June.

Alseonax rubicaudus (Swains.). The Red-tailed Flycatcher.

M. Babault obtained two males and two females at Pulga at the end of May and judged from their organs that they were breeding.

Culicicapa ceylonensis ceylonensis (Swains.). The Grey-headed Flycatcher.

A common summer visitor to Kulpu breeding in the Zone from 5,000' to 7,000'.

Niltava sundara sundara Hodg. The Rufous-bellied Niltava.

I procured a female in the undergrowth at 7,000' on the ascent to the Bhubhu Pass on August 9, 1923. According to Hume (N. and E. 2nd ed. ii. 20) the species breeds in the valley of the Beas.

Tersiphone paradisi (L.). The Paradise Flycatcher.

The lovely adult male Paradise Flycatcher with his black-crested head, snowy plumage, and ribbon-like tail feathers is a familiar sight to the traveller along the roads of the valley. It is common from Larji up all the valleys to a height of about 5,000' but of course only as a summer visitor.

Lanius vittatus Valenc. The Bay-backed Shrike.

A common summer visitor to the Beas Valley between Larji and Bajaura breeding early in June.

Lanius nigriceps nigriceps (Frank.). The Black-headed Shrike.

M. Babault obtained a male at Pulga and a female at Bajaura in May or June.

Lanius schach erythronotus (Vigors). The Rufous-backed Shrike.

This fine shrike breeds very commonly in June along the valley of the Beas and Tirthan from Larji 3,200' to Banjar 5,000' and Sultanpur 4,000'; a few pairs extend up to Manali 6,000'. Odd shrikes may be observed in the valleys in winter but they may belong either to this form or to *Lanius tephronotus* which is the breeding shrike of Lahul (as a summer visitor only).

Lanius cristatus subsp. ? The Rufous-tailed Shrike.

Hume's remarks [(N. and E. 2nd ed. i. 327) imply that some form of this shrike appears in the valley of the Beas in the late autumn, on migration from Yarkand, but I have no more definite information on the point].

Pericrocotus brevirostris brevirostris (Vigors). The Short-billed Minivet.

The scarlet and black minivets with their grey and yellow mates attract the attention sooner or later of most travellers in Kulu from their conspicuous colouration and their pleasant calls. They breed throughout the forests of Kulu from about 5,000' to 8,000' and probably higher and in the spring and autumn may be seen anywhere in parties. The majority leave Kulu in winter but I have seen a few about Sultanpur, Kasol and Bhui, in November.

Pericrocotus speciosus (Lath.). The Scarlet Minivet.

M. Babault obtained a female at Garampani, and a pair at Pulga in May.

Pericrocotus roseus roseus (Vieill.). The Rosy Minivet.

M. Babault obtained a pair at Bajura in May or June.

Dicrurus macrocerus Vieill. The King-Crow or Black Drongo.

The king crow is a summer visitor to the valley of the Beas and the Tirthan at elevations of 3,000-3,500' from below Sultanpur to Larji and Manglaur. Eggs may be found at the end of May and throughout June.

Dicrurus leucophæus longicaudatus Hay. The Ashy Drongo.

The Ashy Drongo is a common summer visitor to Kulu and Saraj from 3,000' up to 8,000' and probably even higher. The majority of eggs are laid in June.

Acrocephalus dumetorum Blyth. Blyths' Reed Warbler.

While marching through Kulu from May 17 to 25, 1921, I met with this species in some numbers from Kraun 6,000' to Sultanpur 4,000' and along the Beas up to Manali 6,000' along the road. It was then on the spring passage, and had for a month previously been similarly common in the Kangra Valley and at Dharm-sala. It was not however observed in Lahul which was obviously out of its line of passage, and by my return from Lahul to Kulu on June 15, it had vanished.

Orthotomus sutorius sutorius (Forst.). The Tailor-bird.

One was heard by the Sultanpur Dak Bungalow 4,000' on June 21, 1921.

Cisticola juncidis cursitans (Frankl.). The Fantail Warbler.

Observed in small numbers about the marshy ground below Bajaura, 3,500' in June 1921 and 1922; it must breed in this locality.

Phylloscopus affinis (Tick.). Tickell's Willow-Wren.

M. Babault obtained 2 males and 2 females at Tchari-Djony and Ghary in May and June.

Phylloscopus pulcher kangræ Ticehurst. The Orange-barred Willow-Wren.

This willow-wren breeds fairly commonly in June about 9,000-10,000' in the scrub and forest about the summit of the Jalauri Pass and doubtless on the other similar ranges. I procured fledged young at Rahla 8,800' on July 11, 1923.

Phylloscopus proregulus simlaensis Ticehurst. Pallas' Willow-wren.

A common species in November and December along the valleys up to at least 5,000'.

Phylloscopus maculipennis (Blyth). The Grey-faced Willow-wren.

A single specimen was obtained on November 15, 1923, at 4,500' by the river at Banjar.

Phylloscopus inornatus humii (Brooks). Hume's Willow-wren.

One was seen carrying food in scrub and oak jungle at 10,000' on the summit of the Jalauri Pass on June 17.

Observed in the valley at Sultanpur and Bajaura in November.

Phylloscopus nitidus viridanus (Blyth). The Greenish Willow-wren.

One or two were observed by the river at Manali 6,000' on May 22, 1921, and a specimen was procured. Willow-wrens apparently of this type were seen at 10,000' on the Jalauri ridge on July 16, 1922.

Phylloscopus occipitalis occipitalis (Blyth). The Large-crowned Willow-wren.

This is the common breeding species throughout Kulu at elevations from 5,000 to 8,000'; probably a summer visitor and passage migrant only.

Phylloscopus trochiloides trochiloides (Sundev.). Blyths' Crowned Willow-wren.

Procured by M. Babault at Ghary and Pulga in May.

Seicercus burkii whistleri Ticehurst. The Black-browed Flycatcher-Warbler.

Breeds fairly commonly in the deep scrub at 9,500-10,000' about the summit of Jalauri Pass in June, and doubtless on all the similar ranges of Kulu. Single specimens were seen in the Bhuin marsh 3,600' on December 10, 1922 and below Kraun at 5,000' on November 1, 1923.

Seicercus xanthoschistos albosuperciliaris (Jerd.). The Grey-headed Flycatcher-Warbler.

A very common species in Kulu breeding throughout the valleys from 3,000' apparently up to 8,000', and probably remaining at much the same elevations throughout the winter.

Horornis pallidus pallidus (Brooks). The Pale Bush-warbler.

This bird appears to breed commonly about 6,000'–8,500' in the nullahs above Manali where I have heard it in song in July and on August 1. In November and December I have procured specimens in the bottom of the valley about Katrain 5,000' and Sultanpur 4,000'.

Suya crinigera crinigera Hodgs. The Brown Hill-warbler.

A common and resident species found from 3,000' up to 5,500' and probably higher in all the valleys.

Oriolus oriolus kundoo Sykes. The Golden Oriole.

A common and general summer visitor to the valleys occurring up to 6,000' ; most numerous along the Beas Valley from Sultanpur to below Bajaura. Breeds in the latter half of May and in June.

Oriolus luteolus luteolus (L.). The Black-headed Oriole.

According to Stoliczka this oriole is 'occasionally seen in the Kulu Valley between 4,000' and 5,000'.

Temenuchus pagodarum (Gmel.). The Brahminy Mynah.

An abundant summer visitor to the Beas Valley from Sultanpur 4,000' to Larji 3,000', and Banjar 5,000' along the Tirthar Valley. One was seen towards Naggar at 4,500' on August 6, 1923. Breeds in June and July.

Acridotheres tristis tristis (L.). The Common Mynah.

An abundant resident throughout the valleys up to about 7,000'. Breeds in May and June.

Ethiopsar fuscus fuscus (Wagl.). The Jungle Mynah.

Observed in June and July only along the Beas Valley from below Bajaura 3,500' to Manali 6,000' but not very common.

Uroloncha punctulata (L.). The Spotted Munia.

A pair were seen at 6,000' above Kraun at the foot of the Bhubhu Pass on July 2, 1921, and a pair by Banjar Rest House 5,000' on November 16, 1923.

Perrisospiza icteroides (Vigors). The Black-and-Yellow Grosbeak.

A male shot at Naggar on January 1, 1904, was sent to the Bombay N. H. Society by General Osborn who stated that it was a winter visitant only (J. B. N. H. S., xv. 716). This however is incorrect. The species is a fairly common resident in Kulu and Saraj occurring at all elevations (I have seen a pair in an oak wood at 3,000' on the bank of the Beas just above Larji on June 10) but most numerous in heavy pine forest from 7,000' to 10,000'.

Mycerobas carnipes (Hodgs.). The White-winged Grosbeak.

On November 9, 1923, I saw 2 or 3 in Silver-fir forest at 9,000' above Pulga.

Mycerobas melanoxanthus (Hodgs.). Spotted-winged Grosbeak.

M. Babault observed this species at Pulga and obtained a pair at Ghary on June 6, with the organs in breeding condition.

Pyrrhula erythrocephala (Vigors). The Red-headed Bullfinch.

M. Babault obtained specimens at Ghary and Pulga in May or June. I found a pair on June 16, 1922, at 10,000' on the northern slope of the Jalauni Pass where they were evidently breeding. In winter I observed a couple near Kasol on November 6, and several about 6,500' behind Katrain in the first week of December. According to Stoliczka numbers appear in Kulu in winter, but this must really refer to a concentration in the valleys of the birds which breed in summer along all the higher ranges.

Loxia curvirostra himalayana Blyth. The Himalayan Cross-Bill.

M. Babault states that he has procured a pair at Pulga (May or June) and also seen it at Manali (June).

Pyrrhospiza punicea humii Sharpe. The Red-breasted Rose Finch.

On July 27, 1922, I shot a male at 13,000' in the Humpta Nala where it was feeding on rocky ground amongst patches of snow.

Carpodacus rhodochroa (Vigors). The Pink-browed Rose Finch.

This Rose Finch breeds at high elevations, probably 9,000' to 11,000', on the ranges in Kulu and Saraj. M. Babault saw fledged young somewhere near Ghary as early as May 11.

In winter it moves down the hillsides and may be found as low as 4,500' along the valleys. It is not uncommon.

Carpodacus erythrinus roseatus (Hodgs.). "The Common Rose Finch.

M. Babault met with this finch at Bajaura in May, and at Ghary and Tchong. These birds were probably late migrants as I doubt whether the species breeds to the south of the Rhotang Range. It of course breeds commonly in Lahul and Spiti.

Carduelis caniceps caniceps (Vigors). The Himalayan Gold Finch.

A few gold finches were observed at Bajaura 3,600' on June 22-23, 1921, and of these two were birds in juvenile plumage. In November and December flocks were met with in the Alders along the Beas from Katraian to below Bajaura.

Callacanthus burtoni (Gould). The Red-browed Finch.

Two males with the organs developed were obtained by M. Babault at Tchari-Djoni (Tcho-Ti) at the end of May or beginning of June.

Acanthis flavirostris brevirostris (Moore). Eastern Twite.

According to Stoliczka this Twite visits Kulu in winter.

Serinus pusillus (Pall.). The Gold-fronted Finch.

I observed some flocks about the hillsides at 6,000'-6,500' behind Katraian in the first week of December 1922.

Hypacanthus spinoides (Vigors). The Himalayan Green Finch.

M. Babault obtained a male (with the organs undeveloped) at Kothi 8,000' at the foot of the Rhotang Pass on June 28. In summer it appears to be common anywhere in Kulu up to a height of at least 9,000', but I only once met with it in winter, below Jari on November 5. The movements of this finch in the Western Himalayas are difficult to understand and detailed records regarding it are badly needed.

Passer domesticus indicus Lard and Selby. The House Sparrow.

The House Sparrow breeds abundantly in Kulu and Saraj up to a height of 7,000', laying chiefly in May. In winter it probably deserts the higher part of this range but is certainly common along the valley of the Beas at that season.

Passer rutilans debilis Hart. The Cinnamon Sparrow.

The Cinnamon Sparrow is common in May and June in the Alder groves of the Beas from Katraian to Kothi 5,000'-8,000', and at similar elevations in the other valleys; down to 4,000' it is less common. A certain number were observed about 4,000-5,000' in November, but many probably move to the outer ranges in winter.

Montifringilla nivalis adamsi Adams. Adam's Snow Finch.

A specimen from 'Kulu' is in the Gould collection in the British Museum, and Stoliczka states that this bird visits Kulu in winter. In summer it breeds abundantly in Spiti but not in Lahul.

Montifringilla nemoricola altaica (Evers.). Stoliczka's Mountain Finch.

I have observed this Mountain Finch from May to August about 13,000' on the summit of the Rhotang Pass, feeding round the patches of melting snow on the bare hillsides. In winter it moves down into Kulu (S. F. i. 42) and there is a specimen from 'Kulu' in the Gould collection, but I have little definite information on the point. I observed some on the Kharshu Tharch above birch behind Baragraon on December 8, 1922, and on the Tharches about 9,500' at Pulga on November 8, 1923. It probably is abundant at some seasons in winter as large numbers visit the outer ranges about Simla and Dharmasala.

Montifringilla brandti haematopygia Gould. Brandt's Mountain Finch.
Stoliczka states that this finch visits Kulu in winter.

Emberiza fucata arcuata Sharpe. The Grey-headed Bunting.

Observed at Manali 6,000' on May 23, near Kraun 5,500' on July 1, and above Jaggatsukh at 9,000' at the entrance to the Humphta Nala on July 28. It is not uncommon and in the last locality the males were in song sitting on the herbage in some open patches, which were waist deep in balsam, wild parsley, nettles and the like. The song is only a moderate performance.

Emberiza leucocephala (Gmel.). The Pine Bunting.

A common winter visitor to the valley, observed in November and December at 3,500'-5,500' at Katraian, Bhuiin, and Bajaura.

Emberiza stewarti Blyth. The White-capped Bunting.

This Bunting breeds from May to July in some numbers in the cultivation of the Beas Valley just below Sultanpur 4,000', and also apparently along the Kraun Road up to 5,000'. The former is probably the locality from which Hume obtained eggs (N. and E. 2nd ed. vol. ii, 167). The song is of the typical bunting type but short and hard. The alarm note is a sharp 'tit' like that of *Horeites brunneifrons*.

I observed a flock on November 30, and December 9, in some thorn bushes on the road between Sultanpur and Raisan.

Emberiza cia stracheyi Moore. The Eastern Meadow Bunting.

Breeds commonly from about 7,000' to 10,000' and in smaller numbers down to 5,000'. Eggs may be found from May to August. In winter it is common from about 6,500' downwards.

Melophus melanicterus (Gmel.). The Crested Bunting.

Occurs in small numbers in June about Banjar 5,000' and Bajaura 3,600', evidently as a breeding summer visitor.

Chelidon urbica Subsp.? The House Martin.

Stoliczka states that a House Martin which he calls *caschmirensis* is common in the Kulu Valley. On August 5, 1923, I saw a large migrant flight of Martins on the road near Naggar. No specimens were obtained but the birds appeared to belong to the typical form and not *caschmirensis*. Probably both occur on migration and one or other form may breed in the highest nalas.

Ptyonoprogne rupestris (Scop.). The Crag Martin.

In 1922 I saw a few about Katraian on December 1-5, and a large flock near Bandrole on December 9. In 1923 I saw a large flock below Jari on November 5.

Hirundo rustica L. The Swallow.

Hume states (N. and E. 2nd ed. vol. ii, 184) that he found the swallow 'breeding at one or two bungalows between Sultanpur in Kulu and Simla. I have no more definite record for Kulu.'

Hirundo smithii Leach. The Wire-tailed Swallow

M. Babault obtained a male at Sultanpur. One or two pairs breed near Bajaura where I saw fledged young on June 29. A summer visitor only.

Hirunda daurica nepalensis Hodgs. Hodgson's Striated Swallow.

This form of Striated Swallow is a common summer visitor to the valleys from 3,000' up to about 5,000', building its nest under rocks on steep hill sides. Eggs are laid in June. Observed from May to August.

Motacilla alba dukhunensis Sykes. Eastern White Wagtail.

A few were observed at Sultanpur 4,000' in November and December.

Motacilla alba personata Gould. The Masked Wagtail.

I found a nest with 5 young in quill and 2 addled eggs on a Shingle bank of the Beas near Raisan 4,500' on May 21, 1921. A full account of this nest has appeared in the Journal, B. N. H. S., xxix. 282.

A few were observed near Sultanpur 4,000' and Bajaura 3,600' in November 1922 and 1923.

Motacilla alba alboides Hodgs. Hodgson's Wagtail.

M. Babault obtained a female at Bajaura in May or June. I saw several on the Beas at Bajaura 3,600' on November 12, 1923.

Motacilla maderaspatensis Gmel. The Large Pied Wagtail.

A resident in small numbers along the Beas from Larji 3,000' to Katraian 5,000'.

Motacilla cinerea melanope Pall. The Grey Wagtail.

The Grey Wagtail breeds commonly in May and June along the rivers and larger streams of Kulu from 4,000' upwards to at least 10,000'.

The majority leave the Sub-division in winter but in November and December I have observed a few about up to 5,000' in the Beas Valley.

Motacilla citreola citreola Pall. The Yellow-headed Wagtail.

Two were seen by the Beas above Manali 6,000' on May 25, 1921.

Anthus hodgsoni Richmond. The Indian Tree Pipit.

Hume long ago described a single egg of this Pipit taken in Upper Kulu on the snowy range bounding Spiti, about 11,000' (N. and E. 2nd ed., ii. 209).

M. Babault obtained females at Pulga on May 19, and Tchari-Tjony on June 1, the latter was by the snow line with the organs in breeding condition.

It probably breeds about the summits of all the higher ranges of Kulu as on June 16, 1922. I found several nests with eggs in all stages of incubation on the Jalouri ridge at 9,500-10,500'. These have been described elsewhere.

In November parties appear in the valleys about 4,000-5,000'.

Anthus leucophrys jerdoni (Finsch). The Brown Rock Pipit.

Common in June and July along the valley roads from Bajaura to Larji and Banjar.

Anthus richardi rufulus Vieill. The Indian Pipit.

This plains' Pipit breeds in small numbers in June about the marshy ground of the Beas Valley below Bajaura at 3,500'. It is doubtless a summer visitor only.

Anthus roseatus Hodgs. Hodgson's Rosy Pipit.

In May and June this lovely Pipit breeds commonly about 12,000'-13,000' along the alpine pastures of the Rhotang Range, and M. Babault found it on similar ground about forest limit above Pulga; it doubtless breeds along the whole of the highest ranges in northern Kulu. It is one of those birds that are particularly partial to the sodden ground on the edge of melting snow. In winter it is common along the Beas Valley about Sultanpur and Bajaura and there as elsewhere in its winter range is largely a marsh pipit.

Anthus spinoletta blakistoni Swinh. The Altai Water Pipit.

I obtained a specimen from a party in a patch of marshy ground by the Tirthan River below Manglaur 4,000' on November 17, 1923.

Oreocorys sylvanus (Hodgs.). The Upland Pipit.

Common, at least from May to July, from 3,000' to 5,500' in the valley of the Beas and along the Tirthan to Banjar. Hume personally took eggs of this bird in Kulu (N. and E. 2nd ed., ii. 21).

Otocorys alpestris longirostris Moore. The Long-billed Horned Lark.

Kulu is the type locality for this form of Horned Lark and there are 6 specimens from 'Kulu' (without more definite data) in the Gould collection in the British Museum. It is found in summer breeding at 13,000' on the summit of the Rhotang Pass and as M. Babault procured it also at the end of May at Tchari-Djony one may assume that it breeds along the whole of the Rhotang chain.

Otocorys alpestris elwesi Blanf. Elwes' Horned Lark.

A female labelled 'Kulu' and collected by Hay is in the Gould collection in the British Museum.

Alauda arvensis guttata Brooks. The Kashmir Skylark.

Flocks of this Lark (which breeds in Lahul but not so far as I know in Kulu unless Hume's eggs belonged to this form) are to be found in November and December in the fields of the Beas Valley from Bajaura 3,600' to Katraian 5,000'. Stoliczka speaks of a Lark which he calls *Alaudula raytal* as a common, winter visitor to Kulu and often caged by the people, but I am not sure what species is indicated.

Zosterops palpebrosa elwesi Stuart Baker. The White-eye.

The White-eye breeds but is not very common in Kulu and Saraj up to a height of about 5,000' and I have observed it from May until August. It is probably a summer visitor only.

Cyrtostomus asiaticus (Lath.). The Purple Sun-bird.

In June 1922 I saw a few of these Sun-birds in the valley of the Beas between Bajaura and Larji about 3,000-3,500'.

Dicaeum ignipectum (Hodgs.). The Fire-breasted Flower Pecker.

Stoliczka states that this beautiful little bird is 'pretty common in Kulu'. I saw a male at some Mistletoe in the garden of Katraian Rest House on December 1 and 2, 1922, and believe that I saw another on November 13, 1923, in the Ban oak forest by the Beas a mile or two above the Outbridge.

Picus squamatus squamatus Vigors. The Scaly-breasted Green Woodpecker.

A common resident in the Kulu and Saraj occurring at least from the bottom of the valleys up to 7,000' in winter and probably higher in summer. At Manikaran I saw one of these Woodpeckers perch on the side face of a great boulder, but near enough to the top to catch the edge with two front claws.

Picus canus occipitalis Vigors. The Black-naped Green Woodpecker.

On June 26, 1922 I saw three of these woodpeckers together on the bank of the Beas below Manali 6,000'.

Dryobates hyperythrus (Vigs.). The Rufous-bellied Pied Woodpecker.

I saw an adult male on May 17, 1921, at 8,000' on the northern face of the Bhubhu Pass.

Dryobates himalayensis (Jard. and Selby). The Himalayan Pied Woodpecker.

A common and resident species, but not observed below 6,500'.

Dryobates auriceps (Vigors). The Brown-fronted Pied Woodpecker.

A common and resident species throughout the valleys from Larji 3,000' up to about 6,000' and possibly higher.

Liopicus mahrattensis (Lath.). The Yellow-fronted Pied Woodpecker.

M. Babault obtained a female at Ghary in May although this is not a bird which might have been expected to occur in Kulu.

Picumnus innominatus innominatus Burton. The Speckled Piculet.

A pair bred probably annually in the rest house compound at Sultanpur 4,000', and I saw a single bird below Jari at 5,000' on November 5, 1923.

Megalaema virens marshallorum Swinhoe. The Great Himalayan Barbet.

In summer this fine Barbet is common in the great forests of Kulu from about 6,000' upwards; in November and December I have observed it also at 6,000' but it doubtless occupies a lower zone during the winter months.

Coracias garrula semenowi Loud. and Tschusi. The Kashmir Roller.

On May 21, 1921, I saw a Roller by the road side just below Raisan 4,800' on the Beas.

Merops orientalis Lath. The Little Green Bee-eater.

Stoliczka states that this Bee-eater is not uncommon in Southern Kulu from March till the end of October. I have only met with it once, when two were seen in cultivation below Bhuin 4,000' on November 4, 1923.

Ceryle lugubris guttulata Steg. The Himalayan Pied Kingfisher.

This fine Kingfisher is generally distributed and resident throughout Kulu and Saraj from 3,000' at Larji up to about 6,000' on all the rivers and streams. Its large size and handsome black and white plumage and the loud call note 'ping' (similar to one of the calls of the Red-wattled Lapwing) readily attract attention as the bird flies along above the surface of the troubled waters or perches on the trees and boulders that afford handy fishing stations. It occasionally plunges into the water from the wing like the smaller Pied Kingfisher of the plains.

Alcedo atthis (Hasselg.) The Common Kingfisher.

I have observed a few of these Kingfishers along the Beas and Tirthan Rivers up to 6,000' in May and June; they doubtless breed here as M. Babault procured a specimen on May 3, with the organs greatly developed.

Halcyon smyrnensis smyrnensis (L.) The White-breasted Kingfisher.

A resident in small numbers along the valley of the Beas nearly up to Manali 6,000'.

Upupa epops epops L. The Hoopoe.

In summer the Hoopoe breeds commonly along the valleys from Larji up to a height of about 8,000', wherever there is open ground in the vicinity of houses and cultivation. I took c/4 fresh eggs at Sultanpur on May 20 and found several nests with young in June and July, all under the roofs of houses. These birds are summer visitors only, and though an occasional Hoopoe may be seen about the Beas Valley in winter, such birds are probably winter visitors from further north.

Micropus melba (L.). The Alpine Swift.

I have observed this Swift feeding in the Beas Valley about Sultanpur and Katraian in May and June, so it perhaps breeds in some of the ranges.

Micropus apus pekinensis (Swinh.). The Eastern Swift.

On May 21-22, 1921, these Swifts were common along the Beas Valley about Raisan and Katraian. They breed commonly in Lahul.

Micropus pacificus leuconyx (Blyth). Blyth's White-rumped Swift.

On May 21, 1921, I saw these Swifts in company with *M. a. pekinensis* in the Beas Valley about Katraian. Two were seen at Banjar on June 25, 1921. They doubtless breed in the precipices throughout Kulu.

Micropus affinis (Gray). The Common Indian House Swift.

On July 1, 1921, I saw a flight about 5,000' on the road below Kraon.

Hirundinapus caudacuta nudipes (Hodgs.). The White-necked Spinetail.

On June 16, 1922 with great difficulty I secured a specimen of this Spinetail from a flock which were flying about the crest of the Jalouri Ridge 11,000' to the east of the Pass. The flight was exceedingly swift and their wings made a very musical sound in the air different to the usual tearing sound made by the wings of fast flying birds.

Collocalia fusciphaga brevirostris (McClell.). The Himalayan Swiftlet.

Flocks of this swiftlet may be seen feeding about the valleys and lesser ranges anywhere in Kulu and Saraj though I have not observed them over 6,000'. My records refer to May, June, July, August, November and December so the species may well be resident.

Caprimulgus sp? Nightjar.

I have heard Nightjars in the Nagni Nala May 18 and below Shoja on June 15; the call was a rapid chuck chuck chuck with the hollow sound of a stone on ice, but I hesitate to identify the species from this alone.

Cuculus canorus L. The Cuckoo.

The Cuckoo is a common summer visitor to Kulu and Saraj occurring from 3,000' at Larji up to 8,000' and probably higher. A specimen obtained clearly belongs to the race *C. c. telephonus* Heine but the majority appear to belong to the typical form.

Cuculus poliocephalus poliocephalus Lath. The Small Cuckoo.

I have met with this little Cuckoo in the Beas Valley on two occasions, namely a pair in an alder grove above Manali 6,200' on May 25, 1921 and below Sultanpur 4,000' on July 7, 1923. M. Babault however obtained 4 specimens in May and June at Pulga Manikaran and Tchari-Djony.

Cacomantis merulinus passerinus (Vahl.) The Indian Plaintive Cuckoo.

On June 24, 1922, I heard this Cuckoo calling for a long time near Sultanpur Rest House 4,000', and believe that I also heard it at Banjar 5,000' on June 12.

Clamator jacobinus (Bodd.). The Pied-crested Cuckoo.

M. Babault obtained a male on 28th June with the organs in breeding condition at the upper edge of the forests at 12,500' at Rahla by the Rhotang Pass. In June and July this Cuckoo is not uncommon in the lower Beas Valley round about Bajaura and I have also heard it at Banjar 5,500'.

Eudynamis scolopaceus scolopaceus (L.). The Koel.

On June, 22, 1921, I heard a Koel calling in the swamp between Bajaura and Bhuin at 3,800'.

Psittacula eupatria nepalensis (Hodgs.). The Large Indian Paroquet.

M. Babault records that he observed this species in the valley of Kulu in April and May and also obtained a juvenile on the Dulchi Pass.

Psittacula cyanocephala cyanocephala (L.). The Blossom-headed Paroquet.

According to Stoliczka this bird 'may occasionally be seen in the southern portions of the Kulu Valley'.

Psittacula schisticeps schisticeps (Hodgs.). The Slaty-headed Paroquet.

This is the common Paroquet of Kulu and Saraj where it may be found in summer in every valley and on the ridges up to 8,000' and perhaps higher. It is apparently a resident species.

Strix aluco nivicola Blyth. The Himalayan Wood-owl.

This owl breeds fairly commonly in Kulu from 6,000' probably up to about 10,000' and is doubtless a resident species.

Bubo bubo turcomanus (Eversm.). The Great Eagle Owl.

An Eagle Owl was obtained about 12,000' in Kulu in the summer of 1872 while it was eating a snow partridge on the ground. This bird was recorded by Hume in S. F. I. 315 and named *B. hemachalana* but that is merely a synonym of Eversman's earlier name.

Bubo bubo bengalensis Frankl. The Rock Horned Owl.

Large Owls seen by me in cliffs at Katraian Rest House 5,000' on June 19, 1921, and on the Kraun Road near Sultanpur 4,000' on August 7, 1923 were I believe of this species.

Scops plumipes. Scops Owl.

Under this name M. Babault records a male Scops Owl in breeding condition that he obtained at Pulga on May 18.

Glaucidium cuculoides cuculoides (Vigors). The Large Barred Owlet.

This very diurnal species of owl is a common resident in Kulu occurring from the bottom of the valleys to at least 7,500'. On one occasion when marching along the valley road below Manali I came upon an Owlet and a crow fighting desperately in broad daylight on the road for the possession of a disreputable tattered object, which on my nearer approach proved to be a half-grown nestling owlet.

Pandion haliaetus (L.). The Osprey.

In Mr. Donald's list with the remark 'Not common; probably a migrant; may breed'. I doubt the last clause.

Ægyptus monachus (L.). The Cinereous Vulture.

Included in Mr. Donald's list of birds of Prey in the Gazetteer with the remark 'Probably breeds in Kulu; not very common'. In my opinion it is in the

highest degree unlikely that it has ever bred in Kulu which is too far east of its known breeding range.

Torgos calvus (Scop.). The King Vulture.

In Mr. Donald's list with the remark 'Chiefly found among the Lower hills ; nowhere very common'. I saw one on the marsh some 2 miles below Bajaura on June 10, 1922.

Gyps fulvus (Gmel.). The Griffon Vulture.

In Mr. Donald's list with the remark 'Seen near Larji'.

Gyps himalayensis Hume. The Himalayan Vulture.

Fairly common and generally distributed throughout Kulu and Saraj where it breeds in suitable localities.

Gyps tenuirostris Hume. The Himalayan Long-billed Vulture.

In Mr. Donald's list with the remark 'Lower hills, seen near Zakat Khana'.

Pseudogyps bengalensis (Gmel.). The White-backed Vulture.

I saw 3 of these vultures together by the roadside, some 2 miles below Bajaura on November 13, 1923.

Neophron percnopterus (L.) The Egyptian Vulture.

I have observed a few Egyptian Vultures in June at Katraian, Bajaura, Larji and Banjar but they are probably summer visitors only for I saw none in November or December. M. Babault collected a male at Bajaura and a female on the Dulchi Pass and states that they breed in June thereabouts, nesting on cliffs, though in his specimens the organs were not developed. These specimens he identifies as belonging to the race *ginginianus* with the yellow beak, though I should have expected the typical race in Kulu.

Gypaetus barbatus grandis Storr. The Lammergeaier.

Stoliczka has recorded the following note (Jour. A.S.B. xxxvii. 1868) :—'The natives of Kulu, about Plash and the Eastern districts prize the meat very highly, which is not only eaten by the low class, the Kolis, but rather more by the higher class, the Kanaitis. They generally tie a Chukor on a short string, and stick 4 or 5 sharpened spears in the ground crossing each other, so as partially at least to cover the bird, and at the same time to radiate with their points in different directions. The Eagle is watched from some distance and as soon as it throws itself with its usual great force and velocity upon the prey, it is overpowered with large clubs before it can extricate the spears from its body.'

The Lammergeaier is common and resident throughout Kulu and Saraj, and the sight of one or more of these grand birds sweeping round the contours of the hills is a feature of every march. I once saw 4 adults together but it is unusual to see more than a single pair at any time. On one occasion above Manikaran I saw a bird in the dark immature plumage perched on a side bough of a lofty dead tree at the edge of a ravine, but otherwise I have only seen it settle on the ground or on crags and cliffs.

Aquila chrysaetus daphance Hodgs. The Golden Eagle.

Mr. Donald's list contains the following statement :—'Resident ; lives on crows, foxes, pine martins. Takes Monal and Snow-cock occasionally, but crows are his chief food. Therefore a valuable game preserver.'

The Golden Eagle probably breeds amongst the crags of all the higher ranges in Kulu, but the nest has never been taken in Kulu by any European. I have myself observed the species on the wing by the Bhubhu Pass (9,000') on October 31, at over 10,000' at Pulga on November 9, and as below as 6,000' just below Manikaran on November 10. M. Babault observed it at Tchari-Djoni (end of May) and on the Rhotang Pass on June 29.

Aquila heliaca Savigny. The Imperial Eagle.

In Mr. Donald's list with the remark 'Winter migrant ; lives on rats, lizards, carrion.' M. Babault killed a specimen on June 29 on the Rhotang Pass.

Aquila nipalensis nipalensis (Hodg.). The Steppe Eagle.

In Mr. Donald's list with the same remarks as under the last species.

Aquila rapax vindhiana (Frankl.). The Indian Tawny Eagle.

In Mr. Donald's list with the remark 'Not common. Seen in lower valleys. May breed there.'

Aquila clanga Pall. The Large Spotted Eagle.

In Mr. Donald's list with the remark 'Seen near Katraian. Food chiefly frogs and lizards.'

Hieactus fasciatus (Vieill.). Bonelli's Eagle.

In early November 1923 when in company with Mr. Donald I saw a pair of Bonelli's Eagle frequenting a small cliff two or three miles above Sultanpur on the Kraon road at about 4,500-5,000'. They evidently had an eyrie in this cliff or were intending to nest there. One bird was in the beautiful adult plumage, the other was in a curious phase, pale below uniform brownish above, which at first led us to mistake it for some other species.

Hieraetus pennatus (Gmel.). The Booted Eagle.

'Fairly common probably breeds in the valley. Lives on rats, etc., sometimes takes Chukor. Not very destructive to game.' (Donald).

Ictinaetus malayensis perniger (Hodgs.). The Black Eagle.

Mr. Donald remarks of this species:—'Very rare if known at all in the valley. Mr. Howell's inclusion of this species doubtful.' But in N. and E. 2nd ed., vol. iii. 145, Hume records obtaining a single egg from Kulu with the parent bird taken on January 7.

Spizaetus nipalensis nipalensis (Hodgs.). Hodgson's Hawk-Eagle.

In Mr. Donald's list with the remark 'Resident and probably breeds near Naggar. Very destructive to game.' On December 8, 1922, I saw what was apparently a pair of these Hawk-Eagles chasing a Falcon with booty at a great height across the valley above Katraian.

Circus gallicus (Gmel.). The Short-toed Eagle.

In Mr. Donald's list with the remark 'Seen in Saraj near Sutlej river. Food rats, lizards, snakes, etc.'

Buteo teesa (Frankl.). The White-eyed Buzzard-Eagle.

In Mr. Donald's list with the remark 'Seen near Bajaura. Probably a wanderer but may be resident. Food, rats, mice, worms, lizards.' In 1921 I saw one above Bajaura on June 22, and 2 or 3 about the marshy ground some 2 miles below Bajaura later on June 23 and 29. M. Babault obtained the young in May or June from a nest at Bajaura.

Haliaetus albicilla (L.). The White-tailed Sea Eagle.

Down as 'a migrant' in Mr. Donald's list. He records (J.B.N.H.S., xxvi. 1071) a supposed example that he saw on the Beas in April 1916.

Potioetus humilis (Jerd.). The Himalayan Fishing Eagle.

In Mr. Donald's list with the remark 'Resident and probably breeds. Destructive to fish.' He states (J.B.N.H.S., xxvi. 1019) that it is fairly common all over the Kulu Valley. I have seen an occasional eagle in June and July along the Beas from Sultanpur to Manali which were probably of this species but no specimens were procured.

Haliastur indus indus (Bodd.). The Brahminy Kite.

'Not common in the lower valleys near rice fields' (Donald).

I saw a pair opposite to Katraian over the rice fields across the river on July 29, 1922. It is doubtless only a rains visitor as in the Kangra Valley.

Milvus migrans govinda Sykes. The Common Pariah Kite.

The Pariah Kite is not uncommon and probably resident along the Beas Valley from Manali to Larji and up the Tirthan Valley to Banjar, up to a height of about 6,000'.

Milvus lineatus (Gray). The Large Kite.

Hume states in *Nests and Eggs* 2nd ed., vol. iii. p.176, that he has obtained the eggs of the Larger Kite from Kulu. This species is often difficult to

distinguish in the field from the Common Pariah Kite but I possess three specimens collected in Kulu a breeding male from Kraun 5,000' July 1, 1921, a nestling from a nest at Bajaura 3,600' June 8, 1922, and an immature male from Katraian 5,000' December 9, 1922, and believe that I have seen others occasionally along the valley from Naggar to Bajaura in the summer months. A Kite seen at 12,000 feet on the Rhotang Pass on May 26, 1921, was most probably of this species.

Elanus caeruleus caeruleus (Desf.) The Black-winged Kite.

In Mr. Donald's list with the remark 'A migrant. Lives on insects.'

Circus cyaneus (L.). The Hen-Harrier.

'A migrant; fairly common in autumn and spring' (Donald).

M. Babault obtained a female in May at Bajaura with the organs developed but he was I think wrong in drawing the conclusion that this bird was on its breeding ground.

(I saw some species of Harrier in the ring-tail plumage at Pulga 7,000' on November 8, 1923, quartering the fields in front of the Rest House.)

Circus aeruginosus (L.). The Marsh-Harrier.

'A migrant; fairly common in autumn and spring' (Donald).

M. Babault obtained 2 males at Bajaura on June 13, with the organs developed.

Buteo buteo japonicus (T. & S.). The Himalayan Buzzard.

In November and December I have met what I believe to be the Upland Buzzard occasionally along the bottom of the Parbatti and Beas Valleys but it is not found there during the summer months, and is then probably breeding in the higher ranges. The whole question of the forms of Buzzard that occur in Kulu and their status requires careful examination.

Buteo ferox (S.G. Gmel.). The Long-legged Buzzard.

Buzzards, probably both of this species and the last, are common in the valleys in winter, and some of them appear to breed on the ranges. Hume states (N. & E. 2nd ed., iii. 125) that typical *ferox* breeds in Kulu and that he possessed an egg with the skin of the parent obtained on January 10.

The race *B. f. hemilasius* Temm. & Sch., also occurs in Kulu as a skin obtained by Hume and made the type of his *Archibuteo leucoptera* (S.F.I. 318) is in the British Museum.

Astur gentilis (Linneus). The Goshawk.

There is very little definite information on record about the Goshawk which probably breeds in the higher forests of Kulu. Certain it is that several are netted annually on the ranges of the Parbatti Valley and Saraj and taken down into India for sale to Falconers.

On December 10, 1922, at Bluin I met a man with an adult male and two immature females tied to a pole, hooded and with the tails sewn up in cloth according to custom, and he stated that they had been caught in Saraj a week or two earlier.

A bird seen by me in the distance about 10,000 ft. above Pulga, on November 9, 1923 was perhaps an adult Goshawk.

Astur badius dussumieri (Temm.). The Shikra.

'Common; resident and breeds' (Donald).

I shot a fine male in an alder grove (4,000 ft.) just above Sultanpur on May 21, 1921.

Accipiter nisus (L.). The Sparrow-hawk.

'Common; resident and breeds' (Donald).

I have seen an occasional *Accipiter* in Kulu but usually under circumstances that did not allow me to be sure of the exact species: the majority were probably this bird. M. Babault obtained a pair at Tchari-Djony at the end of May and states that he found nests in the forests in this locality.

Accipiter virgatus affinis (J. E. Gray). The Besra Hawk.

'Probably resident and breeds. Nowhere common' (Donald).

Stoliczka on the other hand (J. A. S. B. xxxvii) states that the Besra is far more common than the Sparrow-hawk in the Kulu Valley. I obtained a female at Manali (6,000') on August 4, 1923.

Falco peregrinus L. The Peregrine Falcon.

'A winter migrant' is the remark in Mr. Donald's list.

Falco peregrinus peregrinator Sund. The Shahin.

'Resident and probably breeds. Destructive to small game such as partridges, chukor, etc.' (Donald). I have seen single Falcons above Manali (6,200') on June 17, 1921 and above Katraian (6,000') on December 8, 1922, which were probably of this species. I also have seen an undoubted pair of Shahins at Larji (3,000') on November 18, 1923, when they were bullying an Eagle on the hillside in front of the Rest House.

Hume records (N. and E. 2nd ed., iii. 186) that he possessed an egg taken near Deet in Kulu on February 6, and two eggs taken near Nitta in Kulu on February 3.

Falco severus indicus (Meyer & Wiglls.). The Indian Hobby.

Donald states that it is 'Resident and probably breeds', while Stoliczka says (J. A. S. B. xxxvii) that is not common in Kulu. These statements appear to me to require verification, as I am of opinion that this Hobby has not such a wide range as is usually attributed to it.

Falco subbuteo subbuteo (L.). The Hobby.

I shot a fine adult male Hobby on July 28, 1922, at 9,000' at the mouth of the Humpta Nala, and another adult male on the summit of the Rhotang Pass 13,000' on July 12, 1923. A Falcon seen at 7,000' in the pine forest above Manali on the Kothi Road on August 4, 1923, was almost certainly also of this species. M. Babault obtained a pair in breeding condition at Pulga on May 19.

Falco tinnunculus interstinctus Mc Cl. The Kestrel.

During the summer the Kestrel is exceedingly common throughout Kulu from the bottom of the valley up to heights of 10,000 and 12,000'. A pair seem to breed in every rocky cliff of importance and many pairs also breed in the conglomerate cliffs of earth and boulders which represent the remains of the old bed of the valley. During the winter the species is distinctly less common and at this season many birds doubtless leave Kulu and winter in the plains. These little Falcons are very quarrelsome and the approach of any larger bird of pair to their eyries is the signal for a great display of temper, the intruder being mobbed with an incessant petulant screaming note.

M. Babault found 4 feathered young in a nest at Rahla on June 24.

The typical race may be expected as a winter visitor and passage migrant through Kulu.

Sphenocercus spheurnus (Vigors). The Kokla Green Pigeon.

The Kokla Green Pigeon is a very common summer visitor to Kulu and Saraj occurring in all the valleys up to at least 6,000' and doubtless higher. Stoliczka notes that it is very fond of Mulberry fruit and it is distinctly partial to elms and alder trees.

Columba livia subsp? The Blue Rock-Pigeon.

The Blue Rock Pigeon breeds very commonly in the rocky gorges and precipices throughout Kulu and Saraj up to a height of at least 10,000'. It is a resident species but some of the flocks which feed in cultivation in the valleys during the winter months may be immigrants.

Columba rupestris Pallas. The Hill Blue Rock-Pigeon.

M. Babault met with this species at Tchari-Djony. It is of course common in Spiti.

Columba leuconota (Vigors). The Snow Pigeon.

M. Babault met with the Snow Pigeon at Tchari-Djony. In May and June I have met with a few on the southern slopes of the Rhotang Pass, usually over 10,000' though I have seen it as low as 8,500' below Rahla. There is a specimen from Kulu dated February in the Gould collection.

Streptopelia orientalis meena (Sykes). The Indian Rufous Turtle Dove.

The Turtle Dove is a common summer visitor to Kulu and Saraj occurring at all heights during the passage but probably not breeding below 6,000'.

Streptopella chinenses suratensis (Gmel.). The Spotted Dove.

The Spotted Dove breeds commonly in the valleys of Kulu and Saraj up to about 6,000' at Juggatsukh. On June 20, I found a nest placed on the rafters of the rest house verandah at Bajaura. It is probably a summer visitor only.

Streptopelia senegalensis cambayensis (Gmel.). The Little Brown Dove.

M. Babault obtained two females at Ghary on May 8, and a male at Bajaura.

Streptopella decaocto decaocto (Friv.). The Indian Ring Dove.

A common Summer visitor to the valley of the Beas from Larji 3,000' to Manali 6,000', but less numerous above Sultanpur.

Catreus wallichii (Hardw.). The Cheer Pheasant.

Hume records taking a nest with 4 eggs early in May a few miles from Jaggat sukh (N. and E. 2nd ed., vol. iii, 413). My own collection contains 5 eggs which were brought in fresh to me from the neighbourhood of Katraian in May. The eggs of this pheasant however continue to be sufficiently rare in collections.

The Cheer Pheasant is apparently found throughout Kulu and Saraj at moderate elevations above 5,000' but as elsewhere in its range it is sparsely distributed and very local. According to Tyacke (Manual Rev. ed. 1907) the best locality for it in Kulu from the sportsman's point of view is the Dobi Nala. M. Babault collected specimens on the Dulchi Pass. Personally I only met with it in Kulu in the Parbatti Valley at Kasol on open dry grassy slopes amongst scattered cheel trees. It has no seasonal altitudinal movement.

Pucrasia macrolopha (Less.). The Koklas Pheasant.

The Koklas Pheasant is common in Kulu and Saraj in the middle zone of forests from about 7,000 to 9,500'.

Gennæus hamiltoni (Griff.). The White-crested Kalij Pheasant.

This is the common pheasant of Kulu and Saraj and it is very generally distributed at all heights from 4,500' up to 8,000', being especially partial to heavy undergrowth in the neighbourhood of water.

Lophophorus impejanus (Lath.). The Monal.

The numbers of the Monal Pheasant are periodically reduced by netting and snaring in those areas where the slackness or venality of the local subordinate officials encourages the poaching instincts of the Kulu villager; for this pheasant besides affording a welcome dish is considered peculiarly appropriate to form a 'Dali'; while the plumage of the male—and more especially the long crest feathers, has a certain monetary value. When poaching is reduced to the minimum the Monal is common in all the forests of the higher ranges from 8,000 to 12,000'; with the descent of the snowline in winter the birds collect in the lower portion of their range and then excellent sport may be obtained by the sportsman who is sound enough in wind and limb to undergo the necessary climbing. I know no finer sport; unrivalled air and scenery, the magnificence of the quarry, the difficulty of the climbing and shooting and the immense satisfaction as each bird is gathered in to the bag, all combine to afford a day's sport which is seldom equalled and never surpassed in the annals of the shot gun. But the bag is invariably small. Personally I have never killed more than six Monal in one day though other pheasants may also be obtained to swell the bag.

Tragopan melanocephalus (Gray). The Western Tragopan.

The Tragopan is the rarest of the pheasants of Kulu but it may be found in small numbers here and there on the high ranges at the same elevations as the Monal and also slightly lower in winter. It is more of a skulker and is usually found in thick undergrowth, Rhue or light Ringal Bamboo growth. The eggs are very rare in collections but I obtained 4 rather incubated eggs from Saraj in May 1928 through a village headman.

***Coturnix coturnix coturnix* (L.).** The Quail:

Stoliczka states that the Quail may occasionally be obtained in the Kulu Valley between 4,000' and 5,000'; Kulu is however outside the main migration route of the species.

***Arboricola torqueola millardi* SB.** The Simla Hill Partridge.

I have heard the call of this partridge not infrequently about the summit of the Dulchi Pass and Tyacke states (Manual Rev. ed. 43) that this is the only spot in the Kulu Valley where it is to be found.

***Alectoris graeca chukar* (Gray).** The Chukor.

This splendid game bird may be found throughout Kulu and Saraj wherever the absence of forests provides the necessary open ground, though the stonier and more barren the slopes the greater the likelihood of obtaining sport. At one time good bags were procured, the best that I have heard of being over 40 brace, but of late their numbers have been reduced by poaching. The Chukor is a favourite cage bird in Kulu and numbers are taken thence into the outer hills.

***Francolinus francolinus asiæ* Bonap.** The Black Partridge.

The Black Partridge is found in small numbers in the valley of the Beas from Raisan to Larji, in the Kraun Valley, and up the Tirthan to Banjar at heights up to 6,000'. It is however fairly common only in the open cultivated valley about Bhuin and Bajaura.

***Tetraogallus himalayensis* (Gray).** The Snow Cock

There are several specimens from Kulu in the Hume Collection but the only definite locality specified is the Jalouri Range (January-February). Stoliczka states that it is found in Northern Kulu. I have no personal knowledge of the bird in Kulu or Saraj but M. Babault met with it at Tchari-Djony. It is probably common enough on some of the highest ranges.

***Lerwa lerwa* (Hodgs.).** The Snow Partridge.

Stoliczka states that the Snow Partridge 'is numerous in the north-western parts of Kulu during the winter, when it descends from the snowy ranges somewhat lower down'. In the Hume collection there are 8 specimens collected in January and February on the Jalouri range, and two from Nunda in February. M. Babault met with it at Tchari-Djony at the end of May. I received a specimen in the flesh which had been obtained somewhere in Saraj and Mr. Shuttleworth, I.C.S. (once Sub-Divisional Officer of Kulu) informed me that he shot a single bird from a covey in February, 1919 on the hump of the Rhotang Pass above Rahla at about 9,500-10,000'. More definite information about this bird is greatly to be desired, as its numbers appear to be diminishing throughout the Western Himalayas.

***Amaurornis fuscus* (L.).** The Ruddy Crake.

M. Babault found it in small parties in the Bajaura marsh on June 13 and secured a male. I obtained a male (with the organs partly developed) on June 30, 1921, at Sultanpur 4,000' in the alder grove between the town and the Tehsil.

***Lobivanellus indicus indicus* (Bodd.).** The Red-wattled Lapwing.

The Red-wattled Lapwing is fairly common in summer along the valley of the Beas from Manali 6,000' to Larji 3,000'. I fancy the majority of these birds are only summer visitors as with the exception of a party of 4 seen at Bajaura on November 12, 1923. I have seen none in winter.

***Charadrius dubius jerdoni* (Legge).** The Little Ringed Plover.

On June 8 and 9, 1922, I found a couple of pairs of Ring Plover which were clearly nesting on the shingle banks of the Beas at Bajaura 3,600'. M. Babault obtained a pair in June in the same locality and also notes that the species was in parties, probably I suppose family parties.

Ibidoryhynchus struthersii Vigors. The Ibis-Bill.

One or two pairs of this beautiful and interesting bird are resident in the valley of the Beas and breed on the shingle beds of the river but I think it desirable to suppress the exact locality.

Tringa hypoleuca (L.). The Common Sandpiper.

The Common Sandpiper may be found here and there on the rivers of Kulu any time in the year, though but rarely in summer. I have no evidence that it ever breeds in the country, and it is hardly likely to do so as in Lahul I did not find it breeding anywhere nearer than Jispar.

Tringa ochropus (L.). The Green Sandpiper.

Not uncommon as a winter visitor and non-breeding individuals are also to be met with in summer, along the valley of the Beas.

Tringa totanus (L.). The Redshank.

On June 8, 1922, I saw a Redshank on the shingle of the R. Beas at Bajaura 3,600'.

Scolopax rusticola (L.). The Woodcock.

The Woodcock must breed fairly commonly in all the larger valleys of Kulu about 8,000' to 10,000'. In winter the birds descend to lower levels and after snow has fallen on the ranges they are found in the 'mahals', the alder groves mixed with swamp and bush undergrowth, along the Beas and presumably the Parbatti and other valleys. Unfortunately there is practically nothing on record about the woodcock in this, one of its most noted habitats in India, and details are most desirable as regards the elevations and nullahs in which the bird has been met in the breeding season, its seasonal altitudinal movements, and the sport that it has afforded in winter.

Capella nemoricola (Hodgs.). The Wood-Snipe.

M. Babault obtained two males with the organs developed at Tcho-ti on the River Tcho at the end of May so it doubtless breeds in the vicinity. Details about the bird are sadly wanting.

Capella solitaria (Hodgs.). The Solitary Snipe.

On November 9, 1923, I flushed a solitary snipe form a small half-frozen stream at 9,000', above Pulga; this was at the edge of a small open 'Tharch' in Silver Fir forest. A few days later on November 17, I shot one from the boulder strewn nala by the Manglaur bridge 4,000'.

Capella stenura (Kuhl.). The Pintail Snipe.

There is a specimen from Kulu collected by Major Hay in the Gould collection in the British Museum.

Capella gallinago (L.). The Fantail Snipe.

Stoliczka says that the snipe has been obtained in Southern Kulu in winter.

Phalacrocorax carbo (L.). The Common Cormorant.

A cormorant, presumably of this species, occurs in Kulu though it apparently does not breed in the country. I have seen a few on the Beas from Bhui to Larji in June and November, and one in November on the Tirthan below Manglaur.

Anser anser (L.). The Grey Lag Goose.

Occurs in the list of Game birds given in the Gazetteer.

Anser indicus (Lath.). The Bar-headed Goose.

Occurs in the list of Game birds given in the Gazetteer.

Nettopus coromandelianus (Gm.) The Cotton Teal.

Occurs in the Gazetteer list.

Anas pœcilorhyncha pœcilorhyncha Forst. The Spot-bill Duck.

Occurs in the Gazetteer list.

Anas platyrhynchos (L.). The Mallard.

A few were observed in the first half of November on the Beas about Bhuin and Bajaura and on the Tirthan at Manglaur.

A few pairs are said to breed at the little marsh at Dalogi 7,000 feet in the Sainj Valley but the statement has not been verified.

Nettion crecca (L.). The Common Teal.

A very big flock of Teal was observed feeding on water-logged cultivation at Bhuin on November 4.

Querquedula querquedula (L.). The Garganey.

Occurs in the Gazetteer list.

Mareca penelope (L.). The Wigeon.

A small party were observed on the Beas at Bajaura on November 12.

Chaulelasmus streperus (L.). The Gadwall.

A few parties were seen on the Beas from Bajaura to Larji during the first half of November.

Spatula clypeata (L.). The Shoveller.

Two or three were seen at Bajaura and Oot on November 12 and 16.

Marmaronetta angustirostris (Mên.). The Marbled Duck.

Netta rufina (Pall.). The Red-crested Pochard.

Nyroca ferina (L.). The Pochard.

Nyroca rufa (L.). The White-eyed Pochard.

Nyroca fuligula (L.). The Tufted Duck.

The names of these 5 ducks all occur in the list in the Gazetteer.